

Title (en)  
FREQUENCY RAMP INVERSION FOR INTERFERENCE MITIGATION

Title (de)  
FREQUENZRAMPENUMKEHR ZUR INTERFERENZABSCHWÄCHUNG

Title (fr)  
INVERSION DE RAMPE DE FRÉQUENCE POUR LA RÉDUCTION DES INTERFÉRENCES

Publication  
**EP 3779500 A1 20210217 (EN)**

Application  
**EP 19194469 A 20190829**

Priority  
EP 19191476 A 20190813

Abstract (en)  
A radar transceiver (400) comprising a transmit branch (450, 455, TX) arranged to transmit a radar signal at a frequency f(t) and with one or more ego ramp parameters comprising ego ramp polarity, and a receive branch (RX, 405, 410, 420, 430, 460) arranged to receive a radar signal, wherein the receive branch comprises an interference monitoring circuit (430) configured to monitor the received signal for interference, and to generate a control signal (440) if interference is detected of the same ramp polarity as the ego ramp polarity, wherein the transmit branch is arranged to switch sign of the ego ramp polarity parameter in response to the control signal (440).

IPC 8 full level  
**G01S 7/35** (2006.01); **G01S 13/34** (2006.01)

CPC (source: EP US)  
**G01S 7/023** (2013.01 - EP US); **G01S 7/0233** (2021.05 - EP US); **G01S 7/0235** (2021.05 - EP US); **G01S 7/0236** (2021.05 - EP US);  
**G01S 7/35** (2013.01 - EP); **G01S 13/32** (2013.01 - US); **G01S 13/343** (2013.01 - EP); **G01S 13/42** (2013.01 - EP); **G01S 13/931** (2013.01 - EP US)

Citation (applicant)  
• EP 3489710 A1 20190529 - VEONEER SWEDEN AB [SE]  
• EP 3324201 A1 20180523 - AUTOLIV DEV [SE]  
• US 2019011533 A1 20190110 - GINSBURG BRIAN PAUL [US], et al

Citation (search report)  
• [XI] WO 2019106656 A1 20190606 - ARBE ROBOTICS LTD [IL]  
• [XI] US 2010085233 A1 20100408 - WINTERMANTEL MARKUS [DE], et al  
• [A] US 10067221 B2 20180904 - GINSBURG BRIAN PAUL [US], et al

Cited by  
CN113406672A

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3779500 A1 20210217; EP 3779500 B1 20240821**; EP 3779499 A1 20210217; EP 3779508 A1 20210217; EP 3779508 B1 20221228;  
US 2022365169 A1 20221117; WO 2021028481 A1 20210218; WO 2021028482 A1 20210218

DOCDB simple family (application)  
**EP 19194469 A 20190829**; EP 19191476 A 20190813; EP 19211579 A 20191126; EP 2020072643 W 20200812; EP 2020072645 W 20200812;  
US 202017634107 A 20200812